

What is claimed is:

1. A method of measuring defocusing, comprising the steps of:
applying a resist to the top surface of a semiconductor wafer;
subjecting the resist to exposure to light, wherein the exposure is carried out by deviating a focus of the light by a given distance away from the resist, in a direction perpendicular to the top surface of the semiconductor wafer, and by using a mask patterned in a geometrical figure comprising a plurality of small rectangles, each narrower in width than a resolution limit of a pattern exposure system, provided on four sides of a large rectangle, and arranged so as to be perpendicular longitudinally or parallel transversely to the respective four sides of the large rectangle;
forming a resist pattern by developing the resist after the step of subjecting the resist to the exposure to light; and
finding defocusing in relation to the resist on the basis of a length of the resist pattern.
2. A method of measuring defocusing according to claim 1, wherein the exposure is carried out by focusing in a region where a ratio of change in the shape of the resist pattern, to change in the position of the focus, is linear.
3. A method of obtaining correct focusing, comprising the steps of:
applying a resist to the top surface of a semiconductor wafer, having a plurality of shots;

measuring a focus position in relation to the resist;

subjecting the respective shots of the resist to exposure to light by deviating a focus by a given distance away from the focus position, in a direction perpendicular to the top surface of the semiconductor wafer, wherein the exposure is carried out by deviating the focus by a given distance away from the resist, in the direction perpendicular to the top surface of the semiconductor wafer, and by using a mask patterned in a geometrical figure comprising a plurality of small rectangles, each narrower in width than a resolution limit of a pattern exposure system, provided on four sides of a large rectangle, and arranged so as to be perpendicular longitudinally or parallel transversely to the respective four sides of the large rectangle;

forming a resist pattern for the respective shots by developing the resist after the step of subjecting the respective shots of the resist to the exposure to light;

finding defocusing in relation to the focus position in the respective shots on the basis of a size of the resist pattern for the respective shots; and

executing focusing in relation to the resist on the basis of the focus position and the defocusing.

4. A method of obtaining correct focusing, wherein the exposure is carried out by focusing in respective regions where a ratio of change in the shape of the resist pattern, to change in the position of the focus, is linear.